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Listing of the Claims:

A listing of the entire set of pending claims is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (previously presented) A method for mitigating P2P (Peer-to-Peer) interferences, performed by a network system, comprising:

determining redundant code group information, according to code group usage information of a cell in which two UEs (User Equipments) are attempting to establish a P2P link camp, and also according to the code group usage information of a cell's adjacent cells; and

selecting a scrambling code from the redundant code group information and assigning it to the two UEs, so that the two UEs can perform a scrambling operation on P2P signals to be transferred between the two UEs by using the scrambling code.

2. (previously presented) The method of claim 1, further comprising:

measuring a relative position between said two UEs and each of a plurality of other active UEs in a communication state; the two UEs are in the cell where said two UEs are camping and each of the other active UEs are in a communication state with adjacent cells;

if at least one of said two UEs causes radio interference with at least one of said active UEs according to the relative position, further determining whether said UE and said active UE are assigned in a same timeslot; and

wherein said selecting a scrambling code is executed if said UE and said active UE are assigned in the same timeslot.

3. (previously presented) The method of claim 2, wherein the determining the redundant code group information includes:

receiving the code group usage information of said camping cell and its adjacent cells transmitted by said two UEs; and

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determining said redundant code group information according to said code group usage information.

4. (previously presented) The method of claim 2, wherein the determining the redundant code group information includes:

determining the redundant code group information according to the code group usage information pre-assigned to said camping cell and its adjacent cells.

5. (previously presented) The method of claim 2, wherein the measuring a relative position includes:

detecting whether said two UEs fall within a radio range of each of said active UEs; and

detecting whether each of said active UEs falls within the radio range of said two UEs.

6. (previously presented) The method of claim 2, further comprising:

reclaiming said scrambling code when P2P communication ends.

7. (previously presented) A method for mitigating P2P (Peer-to-Peer) interferences, performed by a UE (User Equipment), comprising:

acquiring code group usage information of a cell where the UE is camping through a cell search procedure;

reading the code group usage information of adjacent cells through an adjacent cell search procedure; and

sending the code group usage information of the cell where the UE is camping to a network system and also sending the code group usage information of the cell's adjacent cells to the network system.

8. (previously presented) The method of claim 7, further comprising:

receiving a scrambling code assigned by said network system, the scrambling

code being assigned to the UE by said network system through selecting from redundant code group information determined by said network system according to said code group usage information.

9. (previously presented) The method of claim 8, further comprising:

performing a scrambling operation on P2P signals to be sent by the UE by using said scrambling code; and

sending the scrambled signals to another UE having established a P2P link with the UE.

10. (previously presented) The method of claim 8, further comprising:

receiving the scrambled P2P signals from another UE having established a P2P link with the UE, wherein the scrambled P2P signals are scrambled by the other UE by using a scrambling code assigned by said network system; and

de-scrambling the scrambled P2P signals to obtain information from said other UE by using said scrambling code assigned to the UE.

11. (previously presented) A network system capable of mitigating P2P (Peer-to-Peer) interferences, comprising:

a first determining unit, for determining redundant code group information according to code group usage information of a cell where two UEs attempting to establish a P2P link are camping, and also according to the code group usage information of a cell's adjacent cells; and

a selecting unit, for selecting a scrambling code from the redundant code group information and assigning it to the two UEs, so that the two UEs can perform a scrambling operation by using the scrambling code on P2P signals to be transferred between the two UEs.

12. (previously presented) The network system of claim 11, further comprising:

a measuring unit, for measuring a relative position between said two UEs and

each of other active UEs in a communication state in the cell where said two UEs are camping and its adjacent cells; and

a second determining unit, for when at least one of said two UEs causes radio interference with at least one of said active UEs, further determining whether at least one of said two UEs and at least one of said active UEs are assigned in the same timeslot according to the relative position;

said selecting unit, for selecting said scrambling code from said redundant code group information when the second determining unit determines that at least one of said two UEs and at least one of said active UEs are assigned in a same timeslot.

13. (previously presented) The network system of claim 12, further comprising:

a receiving unit, for receiving the code group usage information of said camping cell and said camping cell's adjacent cells transmitted by said two UEs;

said first determining unit, for determining said redundant code group information according to said code group usage information.

14. (previously presented) The network system of claim 12, wherein said first determining unit determines the redundant code group information according to the code group usage information pre-assigned for said camping cell and said camping cell's adjacent cells.

15. (previously presented) The network system of claim 12, wherein said measuring unit, for measuring whether said two UEs fall within the radio range of each of said active UEs, and measuring whether each of said active UEs falls within the radio range of said two UEs.

16. (previously presented) A UE (User Equipment), comprising:

an acquiring unit, for acquiring code group usage information of a cell where the UE is camping through a cell search procedure;

a reading unit, for reading the code group usage information of adjacent cells

through an adjacent cell search procedure; and

     a sending unit, for sending the code group usage information of the cell where the UE is camping to a network system and also sending the code group usage information of the cell's adjacent cells to the network system.

     17. (previously presented) The UE of claim 16, further comprising:

     a receiving unit, for receiving a scrambling code assigned by said network system, the scrambling code being assigned to the UE by said network system through selecting from redundant code group information determined by said network system according to said code group usage information.

     18. (previously presented) The UE of claim 17, further comprising:

     a scrambling unit, for performing a scrambling operation on P2P (Peer-to-Peer) signals to be sent by the UE by using the scrambling code;

     said sending unit sending the scrambled signals to the other UE having established a P2P link with the UE.

     19. (previously presented) The UE of claim 17, wherein, said receiving unit receives scrambled P2P (Peer-to-Peer) signals from another UE having established a P2P link with the UE, the scrambled P2P signals are scrambled by the other UE by using a scrambling code assigned by said network system; the UE further comprising:

     a de-scrambling unit, for de-scrambling said scrambled P2P signals to obtain information from said other UE by using said scrambling code assigned to the UE.